

This advice is suitable for all trees and shrubs, whether containerised, bare-root or rootballed.

Avoid planting in waterlogged (water sitting on the soil surface or pooled in the bottom of the hole) or frozen (too hard to get the spade in) soil.

Site preparation

- Loosen the soil to a depth equivalent to the height of the rootball
- Improve soil structure on heavy or sandy soils by incorporating organic matter
- It is not beneficial to apply fertiliser at planting time. However, sprinkling an inoculant of Rootgrow over and in contact with the roots.
- If soils are waterlogged over winter install drainage, or plant on a slight mound, about 25-30cm (10in-1ft) high and 1m (39in) in diameter

Guide to planting

1. Remove plants from containers or fabric wrapping. Rootballed plants are planted with hessian, it isn't removed
2. With the exception of Magnolia and Eucalyptus which resent root disturbance, trim potbound roots and spread the roots out of bare-root plants to get an idea of their spread. There is no need to trim or tease out roots from rootballs that are not potbound.
3. Dig a planting hole that is no deeper than the roots, but is ideally at least three times the diameter of the root system.
4. If the sides of the planting hole are compacted, break the soil up with a fork before planting.
5. In grassed areas circular planting holes are easier to mow around, but square planting holes aid root penetration at the corners on heavy soils. A square hole within a mowing circle combines the two **600mm from stem**.
6. Soak bare-rooted trees or shrubs for about 30 minutes prior to planting. And give containerised plants a good water before taking them out of their pots.
7. Place the tree or shrub in the planting hole and position it so that the first flare of the roots are level with the soil surface when planting is complete. With container grown plants, the top layers of compost may need to be scraped away to reveal the flare of roots. Deep planting prevents essential air movement to the root system and makes the lower trunk vulnerable to disease - this can lead to poor establishment.
8. Insert a stake if required. Small trees may not require staking but top-heavy or larger specimens should be staked.
9. Refill the planting hole carefully, placing soil between and around all the roots to eliminate air pockets.
10. Firm the soil gently, avoiding compacting the soil into a hard mass and water in.
11. Protect from [deer](#) or [rabbit](#) damage where necessary by using tree spirals, chicken wire guards or similar.

How to stake trees

There are a number of different staking methods, depending on the type of tree, tree size and method of planting.

All stakes should penetrate the soil to at least 60cm (2ft) deep. If the stake moves in the ground, it will not anchor the plant.

Single stake

This is the standard method for staking bare-root trees, with the stake inserted **before planting**.

- **For most trees:** the stake should be one-third of the height of the tree. This anchors the roots and allows the stem to sway and thicken
- **For trees with long or flexible stems:** use long, vertical stake. There should be a gap of 2.5-3cm (about an inch) between the stem and the stake

Stakes should be inserted on the side of the prevailing wind so that the tree is blown away from the stake. Tie point between 600mm to 1.2m from root ball.

Double stake

Standard method of staking container-grown and rootballed trees. Two or three stakes can be inserted opposite each other, or equally spaced around the tree outside the root ball, and secured to the trunk by long ties or a timber crossbar and tie.

This method is essential on windy sites.

Tie point between 600mm to 1.2m from root ball.

Angled stake

Angled stake for trees planted on slopes. Drive a stake in before or after planting at a 45 degree angle, leaning into the prevailing wind.

Secure with a flexible tree tie.

Tie point between 600mm to 1.2m from root ball.

Guying

Use for large trees when transplanted. Secure strong wire to low stakes inserted at a 45 degree angle away from the tree. Prevent rubbing by covering the wire with rubber hosepipe where it is wrapped around the stem or branches of the tree.

Using tree ties and ground anchors

Ground anchors

Ground anchors are discreet underground staking systems of the rootball. Tree anchors must be fitted at the time of planting.